

## **ABSTRACT**

The invention relates to implementation of multiple simultaneous calls for a mobile station in a mobile communication system. A common traffic channel (TCH) is allocated to several simultaneous calls (applications 1-n) of the mobile station (MS), so that the calls share the capacity of the common channel. Logical links are established for each call inside a common radio link protocol or link access control protocol, which is established over the common traffic channel between the mobile station (MS) and an interworking function (IWF). The common traffic channel (TCH) is allocated when the first call or calls are set up, and the capacity of the traffic channel is adjusted dynamically during the calls. The capacity of the common traffic channel is increased or the allocated capacity is reallocated when a new call is added to the traffic channel. Correspondingly, the capacity is decreased or the allocated capacity is reallocated when a call is cleared from the common traffic channel. The common traffic channel is released after the last call has been cleared.